

CLAIMS

1. A method for manufacturing a floor covering comprising the steps of:-
 - 5 scattering powder, granules or pellets of a thermoplastic material onto a substrate to form a coating;
 - 10 leading the coating between a pair of belts;
 - 15 applying heat to gel the coating between the belts;
 - smoothing the gelled coating to provide a layer of desired thickness;
and
 - 15 cooling the layer.
2. A method as claimed in claim 1, wherein the substrate is a fibre matt material, especially a glass fibre matt material.
- 20 3. A method as claimed in claim 2, wherein the fibre matt has less than 100 g of glass fibre per m² of material.
- 25 4. A method as claimed in claim 3, wherein the fibre matt has less than 65g of glass fibre per m² of material.
5. A method as claimed in claim 4, wherein the fibre matt has from 30 to 50 g of glass fibre per m² of material.
- 30 6. A method as claimed in claim 1 wherein the gelled coating is smoothed by leading the gelled coating between a nipping means.

7. A method as claimed in claim 6 wherein the nipping means comprises a pair of nip rollers defining a gap therebetween.

5 8. A method as claimed in claim 7 including the step of adjusting the gap between the nip rollers.

9. A method as claimed in claim 1 comprising the steps of:-

10 scattering powder, granules or pellets of thermoplastic material onto a first substrate to form a first coating;

15 applying a second substrate over the first coating;

scattering powder, granules or pellets of a thermoplastic material onto the second substrate to form a second coating;

20 leading the coatings between a pair of belts;

applying heat to gel the coatings between the belts;

smoothing the gelled coatings to provide a layered product of desired thickness; and

25 cooling the layered product.

10. A method as claimed in claim 9 wherein the first substrate is defined by a lower of the conveyor belts.

30 11. A method as claimed in claim 9 wherein the second coating is of the same material as the first coating.

12. A method as claimed in claim 9 wherein the second coating is of a different material to the first coating.

5 13. A method as claimed in claim 9 wherein the first coating is of a saturation material to form, on heating, a saturation layer.

14. A method as claimed in claim 9 wherein the second coating is of a basecoat material to form, on heating, a basecoat layer.

10 15. A method as claimed in claim 1 wherein the thermoplastic material is scattered to form, on heating, a saturation layer to receive a basecoat layer.

16. A method as claimed in claim 1 wherein the thermoplastic material is scattered to form, on heating, a basecoat layer.

15 17. A method as claimed in claim 16 wherein the basecoat is formed by a method including the steps of:-

20 scattering a basecoat-forming material onto the saturation layer of the substrate;

leading the substrate between a pair of belts;
and

25 applying heat to the belts to form a basecoat layer on the saturation layer.

18. A method as claimed in claim 1 wherein a substrate is defined by one of the heating belts.

30 19. A method as claimed in claim 1 including the steps of:-

scattering a first thermoplastic material onto a first belt;

5 applying a substrate over the thermoplastic material;

scattering a second thermoplastic material onto the substrate;

10 leading the substrate with the first and second thermoplastic material under a second belt; and

15 20. applying heat to the belts to gel the thermoplastic material to form a backing layer on one face of the substrate and a saturation or basecoat layer on the other face of the substrate.

15 20. A method as claimed in claim 19 wherein the second layer is a saturation layer and the method includes the steps of:-

scattering a third thermoplastics material over the saturation layer;

20 25. leading the substrate between a pair of belts;
and

applying heat to the belts to gel the third thermoplastic material to form a basecoat layer on the saturation layer.

25 30. A method as claimed in claim 1 including the step, after heating, of leading the substrate over a smoothing roller prior to cooling, preferably the substrate is supported on one of the belts as it is led over the smoothing roller, preferably the method includes the step of heating and/or cooling the substrate as it is led over the smoothing roller, preferably the substrate is heated or cooled by heating or cooling the smoothing roller, preferably

the substrate is led over an infeed roller to the smoothing roller, preferably the substrate is led over an outfeed roller from the smoothing roller, preferably the substrate is heated or cooled as it is led over the infeed and/or outfeed rollers.

5

22. A method as claimed in claim 1 wherein the substrate is cooled, after gelling, by leading the pair of belts through a cooling station.
23. A method as claimed in claim 1 wherein the substrate is a mineral felt.

10

24. A floor covering whenever manufacturing by a method as claimed claim 1.